

MEEE

JANUARY 2003 – JANUARY 2004

Andersen, G. L., Radnedge, L., Kiem, P., Wagner, D. , Chu, M. C., and Worsham, P. L. Genetic Relatedness among Isolates of *Yersinia pestis* using Single Nucleotide Polymorphism Analysis. *American Society for Microbiology 104th Meeting*. New Orleans, LA. May 19-23, 2004. LBNL-54156 Abs.

Bakradze, N., Sokhadze, V., Abuladze, M., Asatiani, N., Sapojnikova, N., Kartvelishvili, T.L., Tsibakhashvili, N.Y., Namchevadze, E., Tabatadze, L., Lejava, L., and Holman, H.-Y.N. 2003. A calorimetric characterization of Cr(VI)-reducing *arthrobacter oxydans* at different phases of the cell growth cycle, LBNL-53388.

Borglin, Sharon , Hazen, Terry, Joyner, Dominique, and Huang, Rick. Effects of environmental stressors on signature lipid biomarkers in *Desulfovibrio vulgaris*. *American Society for Microbiology 104th Meeting*. New Orleans, LA. May 19-23, 2004. LBNL-54235 Abs.

Borglin, Sharon, Hazen, Terry C., Joyner, Dominique, and Huang, Rick. Effects of environmental stressors on signature lipid biomarkers in *Desulfovibrio vulgaris*. *10th Annual International Symposium on Microbial Ecology ISME-10 Microbial Planet: Sub-Surface to Space*. Cancun, Mexico. August 22-27, 2004. LBNL-54809 Abs.

Borglin, Sharon, Hazen, Terry, Oldenburg, Curt, and Zawislanski, Peter. 2004. Comparison of Aerobic and Anaerobic Biotreatment of Municipal Solid Waste. *Journal of the Air and Waste Management Association*, **54**, LBNL-50576.

Brodie, Eoin, Hazen, Terry C., Wan, Jiamin M., Tokunaga, Tetsu K., Larsen, Joern , Olsen, Keith, Joyner, Dominique, Andersen, Gary L., and Firestone, Mary K. Biogeochemistry of microbial communities associated with diffusion limited reduction of U(VI) and NO₃⁻ as co-contaminants in natural sediments and soils. *American Society for Microbiology 104th Meeting*. New Orleans, LA. May 19-23, 2004. LBNL-54232 Abs.

Brodie, Eoin, Larsen, Joern, Hazen, Terry C., Wan, Jiamin M., Tokunaga, Tetsu K., Joyner, Dominique, Andersen, Gary L., DeSantis, Todd, Richardson, Paul, and Firestone, Mary. High density oligonucleotide array monitoring of bacterial community dynamics during carbon stimulated uranium bioremediation. *10th Annual International Symposium on Microbial Ecology ISME-10 Microbial Planet: Sub-Surface to Space*. Cancun, Mexico. August 22-27, 2004. LBNL-54787 Abs.

DeSantis, T.Z., Dubosarskiy, I., Murray, S.R., and Andersen, G.L. 2003. Comprehensive aligned sequence construction for automated design of effective probes (CASCADE-P) using 16S rDNA. *Bioinformatics*, **19**(12), pp. 1461-1468, LBNL-52352.

Fields, M. W., Yan, T., Liu, X., Bagwell, C. E., Carroll, S. L., Jardine, P. M., Criddle, C. S., Hazen, T. C., and Zhou, J. Polyphasic characterization of microbial communities under the stressful conditions of nitrate, heavy metals, radionuclides, and acidic pH in contaminated groundwater. *10th Annual International Symposium on Microbial Ecology ISME-10 Microbial Planet: Sub-Surface to Space*. Cancun, Mexico. August 22-27, 2004. LBNL-54788 Abs.

Hazen, Terry C., Joyner, Dominique, Borglin, Sharon, Faybishenko, Boris, Conrad, Mark, Rios-Valezques, Carlos, Malave, Josue, Martinez, Ramon E., Andersen, Gary L., Firestone, Mary, Brodie, Eoin, Long, Philip E., Willet, Anna, and Koenigsberg, Stephen. Functional Microbial Changes During Lactate and HRC-Stimulated Bioreduction of Cr(VI) in Hanford 100H Sediments. *10th Annual International Symposium on Microbial Ecology ISME-10 Microbial Planet: Sub-Surface to Space*. Cancun, Mexico. August 22-27, 2004. LBNL-54808 Abs.

Hazen, Terry C., Joyner, Dominique, Borglin, Sharon, Faybishenko, Boris, Conrad, Mark, Rios-Valezquez, Carlos, Malave, Josue, Martinez, Ramon E., Andersen, Gary L., Firestone, Mary, Brodie, Eoin, Long, Philip E., Willet, Anna, and Koenigsberg, Stephen. Functional Microbial Changes During Lactate and HRC-Stimulated Bioreduction of Cr(VI) in Hanford 100H Sediments. *American Society for Microbiology 104th Meeting*. New Orleans, LA. May 19-23, 2004. LBNL-54237 Abs.

Hazen, T. C., Tien, A., Worsztynowicz, A., Altman, D. J., Ulfig, K., and Manko, T. Biopiles for remediation of petroleum-contaminated soils: A Polish case study. *Proceedings of the NATO Advanced Research Workshop on The Utilization of Bioremediation to Reduce soil Contamination: Problems and Solutions*. Prague, Czech Republic. June 14-19, 2000. Kluwer Academic Publishers, **19**: pp. 229-246, LBNL-46445.

He, Zhili, He, Qiang, Wu, Liyou, Wall, Judy D., Hazen, Terry, Fields, Matthew W., and Zhou, Jizhong. Transcriptional Analysis of Responses of *Desulfovibrio vulgaris* to NaCl Stress Using Whole-Genome Oligonucleotide Microarrays. *American Society for Microbiology 104th Meeting*. New Orleans, LA. May 19-23, 2004. LBNL-54284 Abs.

Herbel, Mitchell J., Switzer Blum, Jodi, Oremland, Ronald S., and Borglin, Sharon E. 2003. Reduction of elemental selenium to selenide: Experiments with anoxic sediments and bacteria that respire se-oxyanions. *Geomicrobiology Journal*, **20**(6), pp. 587-602; DOI: 510.1080/01490450390249505, LBNL-53371.

Holman, Hoi-Ying N., Lin, Zhang, Hazen, Terry C., and Joyner, Dominique. A real-time investigation of *Desulfovibrio vulgaris* response to oxygen stress. *American Society for Microbiology 104th Meeting*. New Orleans, LA. May 19-23, 2004. LBNL-54289 Abs.

Holman, Hoi-Ying N., Lin, Zhang, Hazen, Terry C., and Joyner, Dominique. A real-time investigation of *Desulfovibrio vulgaris* response to oxygen stress. *10th Annual International Symposium on Microbial Ecology ISME-10 Microbial Planet: Sub-Surface*

to Space. Cancun, Mexico. August 22-27, 2004. LBNL-54807 Abs.

Joyner, D., Borglin, S. E., Huang, R., Hazen, T. C., Wall, J. D., Yen, H-C, and Stolyar, S. M. Chemically defined medium for *Desulfovibrio vulgaris* stress studies and biomass production. *American Society for Microbiology 104th Meeting*. New Orleans, LA. May 19-23, 2004. LBNL-54288 Abs.

Malavé, J., Borglin, S. E., Rios-Valezquez, C., and Hazen, T. C. Study of Microbial Community Structure Using Phospholipid Fatty Acid Analysis (PLFA) at a Chromium Contaminated Site. *American Society for Microbiology 104th Meeting*. New Orleans, LA. May 19-23, 2004. LBNL-54287 Abs.

Martinez, R. E., Rios-Valezquez, C., Andersen, G. L., and Hazen, T. C. Molecular Analysis of the Microbial Community Structure in Chromium Contaminated Sites before and after *In Situ* Bioreduction Stimulation by Lactate Injection. *American Society for Microbiology 104th Meeting*. New Orleans, LA. May 19-23, 2004. LBNL-54286 Abs.

Oh, Keun-Chan, and Stringfellow, William T. 2003. Determination of Methyl tert-Butyl Ether and tert-Butyl Alcohol in Water by Solid-Phase Microextraction/Head Space Analysis in Comparison to EPA Method 5030/8260B, Berkeley, CA LBNL-53866.

Palmisano, Anna, and Hazen, Terry. 2003. Bioremediation of Metals and Radionuclides: What It Is and How It Works (2nd Edition) LBNL-42595.

Quinn, N.W.T. 2003. Concept paper for real-time temperature and water quality management for San Joaquin river restoration. *White Paper, US Bureau of Reclamation*, Sacramento, CA, pp. 23 LBNL-53391.

Quinn, N.W.T., and Hanna, W.M. 2003. A decision support system for adaptive real-time management of seasonal wetlands in California. *Journal of Environmental Modelling and Software*, **18**(6), pp. 503-511, LBNL-49206.

Quinn, N.W.T., Chen, C.W., and Stringfellow, W. A decision support system for real-time management of dissolved oxygen in the Stockton deep water ship channel. Environmental Information and Decision Support. *International Symposium on Environmental Software Systems (ISESS)*. Semmering, Austria. May 28-June 2, 2003. LBNL-53394.

Radnedge, Lyndsay, Agron, Peter G., Hill, Karen K., Jackson, Paul J., Tickner, Lawrence O., Neim, Paul, and Andersen, Gary L. 2003. Genome differences that distinguish bacillus anthracis from bacillus cereus and bacillus thuringiensis. *Applied and Environmental Microbiology*, **69**(5), pp. 2755-2764, LBNL-52363.

Stringfellow, W.T., Hanlon, J.S., Borglin, S.E., and Quinn, N.W.T. 2003. Source of biochemical oxygen demand in west-side tributaries of the San Joaquin River, California, LBNL-53373.

Tokunaga, T.K., Wan, J., Firestone, M.K., Hazen, Terry C., Olson, K.R., Herman, D.J., Sutton, S.R., and Lanzirotti, A. 2003. In-situ reduction of chromium(VI) in heavily contaminated soils through organic carbon amendment. *Journal of Environmental Quality*, **32**(5), pp. 1641-1649, LBNL-52528.

White, Alicia, Borglin, Sharon E., and Hazen, Terry C. Mesoscale aerobic and anaerobic landfill bioreactors. *American Association for the Advancement of Science (AAAS)*. Denver, CO. February 13-18, 2003. LBNL-53372 Abs.

Zawislanski, Peter T., Benson, Sally M., Terberg, Robert, and Borglin, Sharon E. 2003. Selenium speciation, solubility, and mobility in land-disposed dredged sediments. *Environmental Science & Technology*, **37**(11), pp. 2415-2420, LBNL-53312.